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Application No.: 10/826,805

Docket No.: JCLA12240-R2

AMENDMENTSIn The Claims:

Please amend the claims as follows:

Claims 1-11 (cancelled)

12. (currently amended) A flip-chip light emitting diode package structure, comprising:
a submount having a first surface and a second surface opposite to the first surface, an indentation on the first surface, a plurality of grooves on a first sidewall and a second sidewall of the submount;

a first patterned conductive reflection film disposed on a first part of the first surface, a first part of the second surface, a first part of a sidewall of the indentation, a first part of a bottom of the indentation and a part of an inner wall of the grooves;

a second patterned conductive reflection film on a second part of the first surface, a second part of the second surface, a second part of the sidewall of the indentation and a second part of the bottom of the indentation, and a remaining part of the inner wall of the grooves; and

a light emitting diode (LED) chip inside the indentation of the submount, wherein the LED chip has two electrodes electrically connecting with the first patterned conductive reflection film and the second patterned conductive reflection film, respectively,

~~wherein no integrated circuit (IC) chip is connected to the first patterned conductive reflection film and the second patterned conductive reflection film.~~

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wherein the first patterned conductive reflection film and the second patterned conductive reflection film cover the entire first surface except for a narrow insulation gap between the first patterned conductive reflection film and the second patterned conductive reflection film.

13. (original) The flip-chip light emitting diode package structure of claim 12, further comprising two bumps disposed between the electrodes of the LED chip, and the first patterned conductive reflection film and the second patterned conductive reflection film.

14. (previously presented) The flip-chip light emitting diode package structure of claim 12, wherein m is a number of the grooves that are on the first sidewall of the submount and n is a number of the grooves that are on the second sidewall of the submount, wherein at least one of m and n is greater than or equal to two.

15. (original) The flip-chip light emitting diode package structure of claim 14, wherein the first and the second sidewalls are next to each other.

16. (original) The flip-chip light emitting diode package structure of claim 14, wherein the first and the second sidewalls are opposite to each other.

17. (original) The flip-chip light emitting diode package structure of claim 14, wherein m is not equal to n .

18. (original) The flip-chip light emitting diode package structure of claim 14, wherein m is equal to n .

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19. (original) The flip-chip light emitting diode package structure of claim 14, wherein m is 1 and n is 1.

20. (original) The flip-chip light emitting diode package structure of claim 12, wherein the grooves are disposed on a sidewall at a corner of the submount.

21. (previously presented) The flip-chip light emitting diode package structure of claim 13, wherein the bumps comprise a Sn-Pb alloy, a Sn-Au alloy or Au.

22. (original) The flip-chip light emitting diode package structure of claim 12, wherein the submount comprises a material selected from the group consisting of aluminum nitride, boron nitride or zinc oxide.

23. (original) The flip-chip light emitting diode package structure of claim 12, wherein an angle formed between the sidewall and the bottom of the indentation is an obtuse angle.

Claims 24-26 (cancelled)

27. (previously presented) The flip-chip light emitting diode package structure of claim 12, wherein at least one of m and n is greater than 1.